

dena, in whom the gland was in a cancerous condition—this was also completely successful.—*Biblioteca Ital.* 1825.

67. *Lithotomy*.—Professor GIORGI appears to have been very successful in the results of his operations for the stone by Vaca's method. Of twenty-eight patients operated on, twenty-five were cured.

68. *Emphysema*.—M. Vitry relates in the Archives Générales de Médecine, for March, 1827, a case of emphysema of the subcutaneous tissue of the whole body, supervening to a convulsive cough, in a little girl twenty-six months old. M. V. gave issue to the air by numerous incisions, and thus cured the little patient.—*Annales de la Médecine Physiologique*.

### MIDWIFERY.

69. *Resuscitation of apparently Still-Born Children*. By J. TOOGOOD, Esq. Member of the Royal college of Surgeons, London.—“Having recently met with a case of an apparently still-born child, which was recovered after an unusual length of time, I am induced to lay an account of it before the public, because from my experience in many cases, I believe a very large proportion of children, apparently dead-born, may be resuscitated, if proper means be resorted to, and persevered in for a sufficient length of time. But the modes generally employed to restore life, such as immersing the infant in warm water, friction, and pouring stimulants down the throat, are not at all calculated to produce the effect intended; and, if these means do not succeed after a short trial, all further attempts are generally abandoned. The plan I always adopt, which has never failed where the child was living during the birth, is very simple and only requires perseverance. I hope, therefore, I shall not be occupying the time of your readers unnecessarily by detailing some successful cases, under circumstances by no means favourable, which I have selected from a great many more.

“Grace White, a very weakly woman, far advanced in consumption, was seized in the morning with uterine hæmorrhage, which continued slightly till the evening, when I saw her; and, while standing by her bed-side the flooding increased with such violence that I thought it best to deliver her instantly. The child was still-born. As soon as I had removed it from the mother, and seen her safe from any immediate danger, I placed a napkin over the child's mouth, and inflated its lungs from my mouth pressing out the air from the chest afterwards, and thus imitating natural respiration. After having continued this process for thirty-five minutes, the child made a very slight attempt to breathe, and the face became slightly suffused; by persevering ten minutes longer, the free action of the lungs was established and the child cried lustily.

“The next case was that of a poor woman, named Sarah Holmes, of the parish of Spaxton, who had been in labour a long time with a presentation of the arm, and as it was her first confinement, it became very difficult to turn the child, particularly as she was advanced in age, and the parts were very rigid. The child was still-born; but, by pursuing the same plan actively for three-quarters of an hour, animation was perfectly restored.

“The next was a case of presentation of the funis; and, as the labour was slow, the child was still-born, but recovered by the same means in half an hour.

“The last case with which I shall trouble you was such as to encourage the attempt at resuscitation under any circumstances. It was a case of twins, and the second child presented with the head, before which a considerable portion of the funis had descended. The delivery was extremely slow, from the general weakness of the woman, who had been for a long time in a bad state of health, and the child was apparently born quite dead. As the mother's situa-

tion was extremely critical, more than half an hour had elapsed before I could attend to the child, and, on inquiry, I found it had been wrapped in a cloth, and placed on a chair in another room. I immediately made the attempt to restore it, and, by persevering steadily for twenty-five minutes, I had the satisfaction to see symptoms of returning life, and in about fifteen minutes more the child breathed freely.

"Every thing in this last case was unfavourable to the restoration of the child—the mother's long-continued disease, the circumstance of her having two children, and more particularly the delay which took place before any attempt was made, during which time the child was exposed in a room without fire in the winter, with a partial and very slight covering.

"I am warranted by my own experience in recommending the attempt to restore all still-born children who have been alive during the birth, and if the means of resuscitation above mentioned be actively employed and steadily persevered in, I believe the majority of cases will be successful. In all cases the restoration of a child is a most satisfactory circumstance, and in some instances of the greatest possible consequence. I have never found any thing necessary but the regular inflation of the lungs, which I do with my own mouth, in the way I have described, and have generally observed the first symptom of returning life to be a tremulous motion of the respiratory organs; the child next makes a very feeble attempt to inspire, and the colour of the face changes. The inflation should then be made quicker; and, as the attempts to breathe increase, a little sal volatile or brandy, rubbed over the palm of the hand, and held over the mouth during the inflation of air, will materially assist the recovery, and has a better effect than pouring stimulants into the stomach. A few smart slaps on the glutei muscles will now generally complete the recovery." —*Lond. Med. and Phys. Journ. August, 1827.* The author appears to think that the above method of resuscitating still-born children is novel. Dr. Dewees has been in the habit of employing it for nearly forty years. Vide Syst. of Mid. He relates also in his lectures cases of resuscitation as remarkable as the above.

70. *Successful Case of Transfusion in Uterine Hæmorrhage.*—In the July No. of the *London Medical and Physical Journal* another successful case of transfusion in uterine hæmorrhage is related by Mr. Douglass Fox. The patient was greatly debilitated by the flow of blood, the fœtus at the sixth month being expelled, and the placenta retained by an hour glass contraction. The hæmorrhage was arrested by the introduction of the hand into the uterus, and the placenta removed. But though the hæmorrhage had ceased, Mr. F. thought "there was every reason to apprehend the immediate dissolution of the patient from extreme exhaustion, as in this stage of the complaint she had become totally unable to articulate, to move, or to swallow; the pulse at the wrist was imperceptible, and the general appearance of the patient wore the aspect of death." Blood was injected into a vein of the arm, and the patient eventually recovered.

[The expedient of transfusion revived by Mr. Blundell, has been resorted to, within the last two years, in nearly a dozen cases, in most of which the patients are said to have recovered. We do not hesitate to believe these accounts, but we very much doubt whether the patient would have died, had the remedy been withheld. We believe this principally upon the following grounds. 1st. Because women bear excessive losses of blood without death following. 2d. Because the quantity of blood transmitted to the alien veins, does not appear sufficient to prevent death, since but a very few ounces have been declared to answer. 3d. Because the additional quantity of blood, though it increases by so much the stock of the patient, does not necessarily or contingently promote the tonic contraction of the uterus, without which, all "appliances and means to boot," will be found unavailing. 4th. Because we have never yet met with a case, where the dormant powers of the uterus could not be roused into successful action, if means were timely employed; were of a proper kind; and properly conducted.]

W. P. D.]

## MEDICAL JURISPRUDENCE.

71. *On the Detection of Hydrocyanic Acid in the Bodies of Animals poisoned by it.*—M. M. LASSAIGNE and LEURET, some time since pointed out an extremely delicate test to detect the prussic acid in the bodies of poisoned animals, namely, the persulphate of iron or the persulphate of copper. Being desirous of ascertaining after how long a period the poison might be discovered, these gentlemen have since made experiments in which "animals were killed by hydrocyanic acid introduced into their food, or thrown into the stomach in a diluted state, the dose never surpassing more than an equivalent of five or six drops of the pure acid, or less than two drops: the animals were left after death for twenty-four hours in a chamber, and then buried in moist earth a foot and a half or two feet deep.

"The disinterment took place after various periods, from fifteen days to a month, and the stomach and the first portions of intestines being separated, were well divided and mixed with pure water, and distilled; a little sulphuric acid was added to the substances in the alembic, and the recipient was cooled by ice and water.

"The products were rendered slightly alkaline, and then tested by the persulphate of iron or sulphate of copper, and a little excess of muriatic acid was poured upon the precipitates occasioned by these salts. No prussic acid could be discovered in animals, the viscera of which were in a state of complete putrefaction; it was found after intervals of two or three days, but never after a longer period than eight days.

"From these experiments it appears, 1. That prussic acid cannot be discovered in animals poisoned by small quantities of it after exposition of these bodies for two or three days to the air. 2. That the disappearance of the poison in the viscera after a longer period than this is due to its decomposition, which is favoured by the contact of the putrescent animal matter. 3. That when it is necessary to examine a body judicially, to ascertain the presence of this poison, it is important that it should be done as quickly as possible."—*The Quarterly Journal of Science, Literature, and Art, from the Journ. de Chimie Méd.* Dec. 1826.

72. *On the Detection of Antimony in Mixed Fluids.* By EDWARD TURNER, M. D. &c.—Many reagents decompose tartar emetic, and cause precipitates in its solutions. Of these the principal are alkaline substances; the stronger acids, as the muriatic and sulphuric; the infusion of gall-nuts and sulphuretted hydrogen. Dr. Turner thinks that the last of these is the only one sufficiently delicate, certain and precise, to be entitled to confidence. On transmitting the sulphuretted hydrogen gas through a fluid containing antimony, the solution will acquire an orange colour, which can scarcely, he says, be mistaken for that of any other metallic sulphuret, by a person acquainted with its appearance. Its colour is quite different from that of orpiment, or of the bisulphuret of tin; and from the sulphuret of cadmium, to which it bears a greater resemblance, it is distinguished by its ready solubility in a solution of pure potash. The sulphuretted hydrogen merely indicates the presence of antimony, without directly showing in what state it existed. This is of little consequence, however, in judicial cases, as all soluble antimonials are poisonous. Dr. Turner gives the following directions for the use of the test. "The fluid supposed to contain tartar emetic, should be mixed with a drachm or two of muriatic and tartaric acids, boiled for a few minutes to separate any substance coagulable by heat, and then allowed to cool, and filtered. The liquid should next be exposed to the action of sulphuretted hydrogen, and boiled to expel the excess of gas; after which the sulphuret will subside, if tartar emetic had been present." To obtain the metal in a separate state, Dr. T. recommends that the sulphuret obtained in the above manner, be placed in the middle of a glass tube about three inches long, and a quarter of an inch in diameter. "One end

of the tube is connected by means of a cork with a vessel from which hydrogen gas is evolved, and to its other extremity is adapted a bent tube, which opens under water, so as to conduct away the hydrogen, and at the same time exclude atmospheric air. After the air within the apparatus has been expelled, heat is applied by means of a spirit lamp to the part of the tube on which the sulphuret is placed. The decomposition of the sulphuret commences at a temperature by no means elevated; but in order to render it complete and fuse the antimony, the glass should be made red hot, and kept in that state for five or six minutes. The temperature at the close of the process may with advantage be increased to bright redness by the use of the blow-pipe.

"The appearance of the metal within the tube depends upon the manner of conducting the experiment. If the sulphuret had been placed in a heap, the metal is found partly in a spongy state, and partly in minute globules; but if it had been diffused over a considerable space, no globules appear, and the metallic lustre is indistinct. The metallic nature of the spongy mass may, in general be brought distinctly into view by placing it on a piece of white paper, and pressing it with the nail or the blade of a penknife.

"The results also depend on the velocity with which the hydrogen is transmitted through the tube. If the gas passes rapidly, some of the metal is hurried off at the moment of separation from the sulphur, and is deposited within the tube as a metallic film, which is sometimes very distinct. If, on the contrary, the passage of the gas is slow, this appearance does not take place.

"By means of this process, I have succeeded in procuring from the tenth of a grain of the sulphuret metallic antimony, the lustre of which could be distinctly seen with the assistance of a lens.

"Should a considerable quantity of animal or vegetable matter subside with the sulphuret, the metallic antimony will then be so mixed with charcoal that its lustre cannot be seen distinctly. In a case of this kind the mixture should be placed in an open tube, and heated to redness by means of a spirit lamp. The antimony is then oxydized, and the oxide, which attaches itself to the cool parts of the tube in form of a white powder, may be recognised by its appearance and volatility."—*Ed. Med. and Surg. Journ.* July, 1827.

73. *On Poisoning with the Sulphurets of Arsenic.*—"Several memoirs have lately appeared in the Parisian journals on the subject of poisoning with the sulphurets of arsenic; and as they explain some facts which have long appeared unintelligible, we shall present a condensed view of the whole. Till very lately it was believed, that, as the artificial sublimed sulphurets are much more poisonous than those of natural origin, some essential difference existed between them in chemical composition. M. Guibourt, however, has completely shown the cause of the differences in their physiological effects. For he has found that the artificial sulphurets always contain a large proportion of oxide of arsenic, sometimes so much as ninety-six per cent. This observation has been more recently confirmed by M. Courdemanche; and we may add that we have seen the cakes of sublimed orpiment lined on their concave surface with octaëdral crystals of the oxide. M. Guibourt, on the presumption arising from this difference, and from the known harmlessness of arsenic in its metallic state, ventured to hint, that the proper sulphurets, such as the native sulphurets, and that procured by transmitting sulphuretted hydrogen through a solution of the oxide, are not deleterious. But Orfila has contradicted this statement by positive experiments. He found that when forty, sixty, or one hundred and twenty grains of the pure artificial sulphuret procured by precipitation, or of the native orpiment of Hungary, or the native realgar of Transylvania, were introduced into the stomach, or into the cellular tissue of dogs, death took place in two, four, or six days, under the usual symptoms of poisoning with arsenic. It is certain, therefore, that the sulphurets of arsenic, when perfectly pure, are poisonous; but they are much less so than the oxide. Their poisonous power appeared a remarkable and anomalous fact, considering that metallic arsenic has been proved

not to be poisonous in its pure state, or when alloyed with tin, or when combined with iron and sulphur in the ore mispickel or arsenical pyrites. But the anomaly has been accounted for by M. Courdemanche, who finds, (Jour. de Pharm. May, 1827,) that if the pure sulphuret of arsenic be boiled even in distilled water, a part of the water is decomposed, sulphuretted hydrogen is evolved, and the white oxide of arsenic is formed and remains in solution—that this change takes place in the cold, but much more slowly—and that it is very much accelerated by the presence of vegetable or animal principles in the water. In all likelihood, then, the sulphurets are poisonous merely because they are in part converted into the oxide. These observations will also account for the statements of Hahnemann regarding the solubility of the sulphurets of arsenic in water. They are insoluble as sulphurets, but will lose weight by boiling, because they are decomposed.”—*Ed. Med. and Surg. Journ. July, 1827, from the Journal de Chimie Médicale et Journal de Pharmacie, passim.*

74. *Poisoning by Phosphorus.*—“On the 24th of April, 1824, a young man, twenty-eight years of age, swallowed half a grain of phosphorus mixed with very hot water. Feeling no effect, he took three days after a grain and a half in the same vehicle at a single dose. He breakfasted almost immediately after, and experienced no remarkable symptom till five, when he had no sooner swallowed some food than he complained of violent pains of the stomach and belly. These were soon followed by incessant and painful vomiting, and abundant discharges from the bowels during the night. On the following day these symptoms were aggravated by violent contractions of the belly. Emollient injections produced neither excretion nor relief. The patient, however, followed his ordinary pursuits; and it was only on the 4th of May, (after a full week,) that he communicated to M. Worbe the circumstances of his complaints. The epigastrium was then extremely painful to the touch, the abdomen was very tense, and its muscles strongly contracted; and he was unable to continue out of the horizontal posture. The features had an expression of sadness, languor, and wavering; the eyes were heavy, and the conjunctiva and skin of a strong yellow tint. The respiration, however, was natural, the pulse was only a little hard, and the tongue and mucous membrane of the mouth were unchanged. *Membra generationi inservientia nequaquam affecta.* The remedies were leeches to the epigastric region, the warm bath, fomentations, and emollient cataplasms, mucilaginous injections, and for drink gum solution in abundance. The leeches were not applied till noon. At ten in the evening the patient was delirious, convulsed, and unmanageable, but carried his hands instinctively to the epigastric region. A physician summoned at seven the next morning ordered to each elbow fifteen leeches, which procured a good deal of blood. M. Flourens, introduced by M. Worbe, recommended leeches to the head; and they were accordingly applied. The condition of the patient, however, became hourly worse. The urine escaped involuntarily; the alvine discharges became frequent and copious, with flabbiness of the muscles; the beats of the heart became weak, and those at the wrist were no longer perceptible. The surface, which was now intensely yellow, became covered with a cold sweat, which was most abundant on the forehead; the extremities became cold; and death took place at three in the morning of the 5th, the second day of his application to M. Worbe.

“The external appearances after death were, yellow tint of the skin, the cutaneous veins of the belly and upper part of the thigh prominent, and the skin of these parts checkered with livid spots, sugillations, and venous impressions. The scrotum was bluish and phosphorescent, according to the observation of M. Bogros. The chest contained much blackish serous fluid; the lungs were gorged with blood; the heart was soft, collapsed, and contained little blood. The muscular tissue only of the stomach was inflamed; the other membranes of the stomach and duodenum were pale and flaccid, and gas was developed in their submucous cellular tissue. The cardiac and pyloric orifices

presented black or rather slate-coloured patches, which might be compared to the blood-shot spots seen on the conjunctiva. All the intestines were tympanitic, but contained little fluid. The bladder was sound, and contained four ounces of urine. Permission to examine the brain could not be obtained.

"M. Worbe and M. Bogros killed two dogs, one of seven the other of eighteen pounds weight, by giving the first half a grain, and the second a grain and a half of phosphorus dissolved in hot water. In the former dog the cardia and pylorus presented the black spots observed in the stomach of the subject above mentioned, but the brain and its appendages were sound. In the second several ecchymosed spots were found in the cellular fat, contiguous to the base of the ventricles of the heart, and the surface of the auricles. The villous membrane of the alimentary canal, especially that of the stomach, was folded or contracted, and easily detached; and the tube was abundantly filled with blackish matter, as far as the cæcum. The veins of the brain were filled with black blood; the membranes were injected and the pia mater was ecchymosed."—*Ed. Med. and Surg. Journ. July, 1827, from the Mém. de la Soc. Med. d'Emulation, Tom. IX.*

75. *Rupture of the Cæcum.*—James Burn, a strong and muscular man, wrestling with a neighbour, after a severe struggle succeeded in throwing his antagonist, who fell on his back, with his knees bent upwards, and Burn fell nearly at the same moment with his abdomen on his antagonist's knees, receiving a violent contusion, chiefly in the region of the umbilicus. According to his own account, he felt as if something had given way internally; he fainted immediately, but soon recovered, complaining of severe pain in his abdomen, with vomiting; he died forty-eight hours afterwards.

On examination, Mr. Speer observed the following appearances:—"the abdomen being opened, a quantity of the contents of the intestines was found in the cavity, and when pressure was made over the large intestines with the hand, their contents were forced through an aperture in the intestines; and on further examination, the cæcum was found ruptured. The aperture was about two inches in circumference, with uneven ragged edges, and evidently the consequence of the fall he had received; it was surrounded with marks of extensive inflammation, as were all the small intestines, on whose surface several layers of coagulable lymph had been deposited in different places, forming a false membrane of a soft texture."—*Dublin Hospital Reports, Vol. IV.*

## CHEMISTRY.

76. *On the Composition of certain Black Vomiting, and their Analogy with the Black Matter of Melanosis.*—"M. LASSAIGNE has lately analyzed with great care the black matter vomited in a case of scirrhus ulceration of the stomach, and has found that its colour, as was conjectured by M. Breschet, is owing to blood, altered in its properties nearly in the same manner as in melanosis. The patient had long been evidently affected with scirrhus of the stomach, was seized latterly with profuse vomiting of a black fluid, and after death the whole pylorus was found scirrhus and ulcerated, with an aperture communicating with the cavity of the third curvature of the duodenum.

"The matter vomited had a chocolate brown colour, and held in suspension darker coloured flocks, which gradually fell to the bottom, leaving a reddish-brown fluid, resembling a solution of altered blood. The fluid was acid, but gave, by distillation at a low heat, a very alkaline liquid containing much ammonia. The residue was strongly acid, gave out much ammonia with potash; yielded to alcohol a solid acid possessing the properties of the caseic acid procured by Proust from old cheese,—a fluid acid which M. Lassaigue pronounces to have been the lactic, but which, according to the late corrections of Berzelius, the discoverer of that supposed acid, must have been modified acetic